Please provide the following information, and submit to the NOAA DM Plan Repository.

#### Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

#### 1. General Description of Data to be Managed

# 1.1. Name of the Data, data collection Project, or data-producing Program:

2007 South Carolina DNR Lidar: Anderson County

### 1.2. Summary description of the data:

The LiDAR data acquisition was executed in 5 sessions, from March 7 to March 9, 2007.

The airborne GPS (ABGPS) base stations supporting the LiDAR acquisition consisted of the bases set up by the flight crews at the Anderson Airport (KAND). Dual Frequency data was logged continuously for the duration of each LiDAR flight mission at a one-second sampling rate or better.

# **1.3.** Is this a one-time data collection, or an ongoing series of measurements? One-time data collection

#### 1.4. Actual or planned temporal coverage of the data:

2007-03-07 to 2007-03-09

#### 1.5. Actual or planned geographic coverage of the data:

W: -82.5920355585, E: -82.55837321138, N: 34.4346351173, S: 34.40673938267

#### 1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)

### 1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

#### 1.8. If data are from a NOAA Observing System of Record, indicate name of system:

### 1.8.1. If data are from another observing system, please specify:

#### 2. Point of Contact for this Data Management Plan (author or maintainer)

#### 2.1. Name:

NOAA Office for Coastal Management (NOAA/OCM)

#### 2.2. Title:

Metadata Contact

### 2.3. Affiliation or facility:

NOAA Office for Coastal Management (NOAA/OCM)

#### 2.4. E-mail address:

coastal.info@noaa.gov

#### 2.5. Phone number:

(843) 740-1202

#### 3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

#### 3.1. Name:

#### 3.2. Title:

Data Steward

#### 4. Resources

Programs must identify resources within their own budget for managing the data they produce.

- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management ( specify percentage or "unknown"):

#### 5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

# 5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

**Process Steps:** 

- 2007-03-01 00:00:00 - The LiDAR data acquisition was executed in 5 sessions, from March 7 to March 9, 2007. The airborne GPS (ABGPS) base stations supporting the LiDAR acquisition consisted of the bases set up by the flight crews at the Anderson Airport (KAND). Dual Frequency data was logged continuously for the duration of

each LiDAR flight mission at a one-second sampling rate or better. The flight plan for LiDAR consisted of parallel flights in a north-south extent across the site. Fiftyfour (54) flight lines of LiDAR data were acquired. In this process, Woolpert employed GPS differential processing and Kalman filtering techniques to derive an aircraft trajectory solution at 1-second intervals for each base station within the project limits. Statistics for each solution (base station) were generated and studied for quality. The goal for each solution is to have: maintained satellite lock throughout the session position standard deviation of less than 5 centimeters low ionospheric noise few or no cycle slips a fixed integer ambiguity solution throughout the trajectory a maximum number of satellites for a given constellation a low (3.0 or less) Position Dilution of Precision (PDOP) Often times a solution for a given base station will meet all of the above parameters in certain portions of the trajectory while the other base station might meet the above conditions in different portions of the trajectory solution. In this case, further processing was done to form different combinations of base station solutions and/or satellites to arrive at the optimal trajectory. For additional information please view the survey report:https:// coast.noaa.gov/htdata/lidar1\_z/geoid12a/data/4822/supplemental/ sc2006 DNR aiken m4822surveyreport.pdf

- 2007-10-10 00:00:00 LiDAR QA/QC verification will be provided by SCDNR through their contractor URS Corporation. The complete LiDAR data set for the entire project area was delivered to URS on August 15, 2007. URS conducted a data assessment. URS provided the review comments on October 10, 2007. URS indicated the LiDAR data met the vertical and horizontal accuracy requirements for the project and would not require any additional work.
- 2015-02-21 00:00:00 The NOAA Office for Coastal Management (OCM) received the files in laz format from SCDNR via an FTP online repository. The files contained lidar elevation and intensity measurements. The data were in State Plane, NAVD88 (orthometric) heights in meters. OCM performed the following processing for data storage and Digital Coast provisioning purposes: 1. The data were converted from state plane coordinates to geographic coordinates. 2. The data were converted from NAVD88 (orthometric) heights in meters to GRS80 (ellipsoid) heights in meters using Geoid 03. 3. The LAS data were sorted by latitude and the headers were updated.
- 5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:
- 5.2. Quality control procedures employed (describe or provide URL of description):

## 6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

### 6.1. Does metadata comply with EDMC Data Documentation directive?

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# 6.1.1. If metadata are non-existent or non-compliant, please explain:

Missing/invalid information:

- 1.7. Data collection method(s)
- 3.1. Responsible Party for Data Management
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

### 6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

#### 6.2.1. If service is needed for metadata hosting, please indicate:

# 6.3. URL of metadata folder or data catalog, if known:

https://www.fisheries.noaa.gov/inport/item/49959

#### 6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC\_PD-Data\_Documentation\_v1.pdf

#### 7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

#### 7.1. Do these data comply with the Data Access directive?

# 7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

# 7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

## 7.2. Name of organization of facility providing data access:

NOAA Office for Coastal Management (NOAA/OCM)

#### 7.2.1. If data hosting service is needed, please indicate:

### 7.2.2. URL of data access service, if known:

https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=4823 https://coast.noaa.gov/htdata/lidar1\_z/geoid12a/data/4823

#### 7.3. Data access methods or services offered:

This data can be obtained on-line at the following URL:

https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=4823

The data set is dynamically generated based on user-specified parameters.;

## 7.4. Approximate delay between data collection and dissemination:

# 7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

#### 8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

#### 8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

## 8.1.1. If World Data Center or Other, specify:

### 8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

### 8.2. Data storage facility prior to being sent to an archive facility (if any):

Office for Coastal Management - Charleston, SC

# 8.3. Approximate delay between data collection and submission to an archive facility:

# 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

## 9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.